

Preliminary Amendment date:
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Docket:
AM100013 C2

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1-67. (cancelled)

68. (New) An RNA for interference or inhibition of expression of a target gene, comprising double stranded RNA of about 11 to about 30 nucleotides in length and a 3' or 5' overhang having a length of 0-nucleotide on each strand, wherein the sequence of the double stranded RNA is substantially identical to a portion of a mRNA or transcript of the target gene.

69. (New) The RNA of claim 68, wherein the double stranded RNA contains about 19 to about 25 nucleotides.

70. (New) The RNA of claim 69, wherein the double-stranded RNA contains 20 nucleotides.

71. (New) The RNA of claim 69, wherein the double-stranded RNA contains 21 nucleotides.

72. (New) The RNA of claim 69, wherein the double-stranded RNA contains 22 nucleotides.

73. (New) The RNA of any one of claims 68 through 72, further comprising at least one modified ribonucleotide.

Preliminary Amendment date:
February 13, 2004

Docket:
AM100013 C2

74. (New) The RNA of claim 73, wherein the modified ribonucleotide is in the sense strand of the double-stranded RNA.

75. (New) The RNA of claim 1, wherein the sequence of the double-stranded RNA is no more than 30% different from the portion of the mRNA or transcript of the target gene.

76. (New) The RNA of claim 1, wherein the target gene is an endogenous gene in a cell.

77. (New) The RNA of claim 76, wherein the cell is in vivo in an organism.

78. (New) The RNA of claim 75, wherein the organism is a vertebrate animal.

79. (New) The RNA of claim 76, wherein the vertebrate animal is a mammal.

80. (New) The RNA of claim 77, wherein the mammal is a human.

81. (New) A method of interfering with or inhibiting expression of a target gene in a cell, the method comprising exposing the cell to an effective amount of the RNA of any one of claims 68 through 78.

82. (New) The method of claim 79, wherein the cell is an animal cell.

83. (New) The method of claim 82, wherein the animal cell is a mammalian cell.

Preliminary Amendment date:
February 13, 2004

Docket:
AM100013 C2

84. (New) The method of claim 71, wherein the mammalian cell is a human cell.

85. (New) The method of claim 70, wherein the animal cell is in vivo.

86. (New) The method of claim 72, wherein the human cell is in vivo.

87. (New) A method of validating a gene as a potential drug target for a disease or condition, comprising: assaying a plurality of dsRNAs, each having a sequence substantially identical to a portion of a mRNA or transcript of the gene, for the ability to generate a desired phenotype in a cell, wherein the phenotype is a phenotype related to the disease or condition; and selecting at least one dsRNA that generates the desired phenotype.

88. (New) The method of claim 87, wherein the gene is a cancer-associated gene and the desired phenotype of the cell comprises an anti-cancer phenotype.